Abstract

A vibration motor obtains a FAST signal when r.p.m. of the motor is faster than reference speed, whereby an output-driving circuit is controlled by the FAST signal to omit parts of the powering periods of respective phases. The motor thus controls the r.p.m. and increases torque ripple generated from the motor. As a result, vibration magnitude increases and insufficient vibration due to downsizing of the motor can be compensated by the control system. A motor driver can be formed with a one chip semiconductor device, so that the number of exterior components is reduced and the motor can be downsized and have light weight